REMARKS

In response to the non-final Office Action mailed on May 5, 2004, Applicant respectfully requests reconsideration of all rejections in the outstanding Office Action in view of the foregoing amendments and following remarks. Claims 1-18, 20-45, 47-61, 64-71, 74-77, 80, and 81 are presently pending. Applicant submits concurrently herewith a Request for a Three-Month Extension of Time along with the requisite extension fee.

I. Objection to Claims 33, 34, 36-38, 40, 46, 49-53, 56, 60, 61, 66, and 67

Claims 33, 34, 36-38, 40, 46, 49-53, 56, 60, 61, 66, and 67 are objected to because of certain informalities noted with respect to the base claim dependence recited in these dependent claims. *See* Office Action, May 5, 2004, page 2. Applicant hereby amends dependent claims 33, 34, 36-38, 40, 41, 43-45, 47-54, 56, 60, 61, and 65-67 to correct the designated based claim from which they depend. Claim 46 has been cancelled. Applicant respectfully requests the Examiner to withdraw the objection to claims 33, 34, 36-38, 40, 49-53, 56, 60, 61, 66, and 67.

II. Prior Art Rejections of the Pending Claims

The Examiner now for the first time rejects claims 1, 15-19, 24, 32, 42-46, 50, 55, 66, 68, 69, 74, 76, and 80 under 35 U.S.C. § 102(b), as allegedly anticipated by U.K. Patent Application No. 2,293,943 to "Haim [*sic*]." *See id.* Moreover, claims 2, 3, 5-7, 25, 33-35, 40, 56, 57, 61, 70, 71, and 77 now stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Haim. *See id.* at page 4. Claims 4, 8-14, 20-23, 26-31, 36-39, 41, 47-49, 51-54, 58-60, 64, 65, 67, 75, and 81 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Haim, and further in view of either U.S. Patent No. 5,726,984 to Kubler; U.S. Patent No. 5,751,971 to Dobbins; U.S. Patent No. 6,147,986 to Orsic; U.S. Patent No. 6,272,117 to Choi; or U.S. Patent No. 6,484,027 to Mauney. *See id.* at pages 9, 10, and 11.

Alternatively, the Examiner has maintained the previously set forth rejection of claims 1-3, 5-7, 15-19, 24, 25, 32-35, 40, 42-46, 50, 55-57, 61, 66, 68-71, 74, 76, 77, and 80 under 35 U.S.C. § 103(a), as allegedly being unpatentable over U.S. Patent No. 5,682,604 to Kashi *et al.* ("Kashi") in view of U.S. Patent No. 5,572,546 to Serfaty. *See id.* at page 5. Moreover, claims 4, 8-14, 20-23, 26-31, 36-39, 41, 47-49, 51-54, 58-60, 64, 65, 67, 75, and 81 still stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Kashi and Serfaty, and further in view of either Kubler, Dobbins, Orsic, Choi, or Mauney. *See id.* at pages 6, 7, and 8.

A. The "Haim" and Kashi References Are Identical

At the outset, Applicant notes that U.K. Patent Application No. 2,293,943 ("the '943 U.K. Application"), which the Examiner refers to as "Haim [*sic*]," presents the identical disclosure word-for-word as U.S. Patent No. 5,682,604 to Kashi ("the '604 Patent"). In fact, the first named co-inventor "Haim" of the '943 U.K. Application is Haim Kashi, the same individual and first named co-inventor of the '604 patent. Moreover, the inventive entities and Assignees between these two references are identical. Although these two references do not cross-reference one another, they are clearly one and the same from no more than a cursory review.

In view of such, the Examiner takes conflicting positions in the prior art rejections. For instance, the Examiner states in the instant anticipation rejection that "Haim" discloses all limitations recited in the independent claims. *See, e.g., id.* at page 2. But yet, the Examiner also states in the various instant obviousness rejections that "Kashi fails to disclose a method and system for dividing a clear access interval into a plurality of time slot wherein each time slot is assigned to each mobile unit" as recited in the independent claims. *See, e.g., id.* at page 5. Since the "Haim" and "Kashi" references are the very same, these two positions are in direct conflict with one another. Certainly, the ability to set forth alternative rejections is an accepted form of practice before the PTO. However, when the factual findings for those alternative rejections directly conflict with one another, the Office Action fails to provide any certainty in which the Applicant can formulate a response thereto. Applicant has been unduly burdened and severely hindered by such uncertainty.

Applicant further notes that the above-noted limitation, which astonishingly is now concluded to be disclosed, but yet not disclosed by Haim Kashi[1] in the same Office Action, was added in an amendment as suggested by the same Examiner to Applicant's representatives during an interview conducted over two years ago. *See* Interview Summary, June 11, 2002, ("The applicant agrees to amend the claim such as each remote has an unique time slot in the clear channel for monitoring to overcome the prior art") and Applicant's Amendment, July 17, 2002. That suggestion was made by the Examiner in order to overcome the 35 U.S.C. § 102(b) rejection based on Kashi in place at the time. This rejection was indeed withdrawn by way of the Office Action, mailed on September 20, 2002. Furthermore, the Examiner has repeatedly

[1] Because they are identical, the '943 UK Application and the '604 U.S. Patent are collectively (or both) referred to as "Haim Kashi."

admitted on record ever since that Haim Kashi fails to disclose "wherein said clear channel assessment interval is partitioned into periods of time and each of said periods of time is assigned to one of said plurality of remote stations" as recited in all of the independent claims 1, 32, 55, 68, 69, and 76. *See, e.g.*, Office Action, October 23, 2003 ("Kashi fails to disclose a method and system for dividing a clear access interval into a plurality of time slot wherein each time slot is assigned to each mobile unit.") and the Office Action, May 5, 2004, *discussed supra*. However, the Examiner has now come back full circle to his original anticipation rejection set forth over four years ago through the introduction of the "newly" discovered "Haim" reference. Such a rejection has already been addressed and overcome, particularly by way of the Examiner's own recommended amendment, which Applicant followed. Because rejections based on Haim Kashi's invention have now been addressed, overcome, appealed, and addressed again in four years of examination, Applicant respectfully submits that some sort of finality is in order. Such a lack of finality is unreasonable.

Applicant respectfully requests that the Examiner correct the inconsistent positions noted above (*i.e.*, pick one or the other position, and withdraw the respective §102 or §103 rejection based on the conflicting position not picked), so that Applicant can have an equitable opportunity to respond to whether or not Haim Kashi teaches or suggests, either alone or in combination with a secondary reference, the claimed "clear access interval."

B. The Anticipation Rejection Based on Haim

Claims 1, 15-19, 24, 32, 42-46, 50, 55, 66, 68, 69, 74, 76, and 80 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by the '943 U.K. Application to "Haim." Particularly, the Examiner asserts that Haim discloses all of the limitations recited in these claims. Applicant respectfully traverses this rejection.

1. Haim Kashi Fails to Disclose All Claim Limitations

The Examiner cites passages within the background section of the '943 U.K. Application as anticipating the limitations recited in previously presented claim 1. Although Applicant maintains that Haim Kashi (whether in the form of the '943 U.K. Application or the '604 Patent) does not anticipate claim 1 as previously presented, this claim and other independent claims have been amended to include the limitation(s) found in dependent claim 19 in order to expedite prosecution. Applicant respectfully submits that Haim Kashi does not disclose the claimed invention.

Referring to the background section of the '943 U.K. Application, Haim Kashi discusses a supervisory control and acquisition-of-data (SCADA) system, in which remote terminal units (RTUs) are interrogated or "polled" by a central unit. *See* '943 U.K. Application, page 1, lines 14-16. There are two principal forms of interrogation: specific interrogation and global interrogation. *Id.* at page 1, lines 22-23. In global interrogation, it is typical for each RTU to have a different time to sense whether the channel is free before transmitting a reply. The highest priority RTU is allocated the shortest time for reply. Thus, when the channel becomes free after the central unit has transmitted to the global interrogation request, it will be the highest priority unit that is first to access the channel, after which time the next unit waits a longer period to sense free channel before it transmits. In this manner, there is an orderly sequence for response from all the RTU's. *Id.* at page 1, lines 27-34.

Independent claim 1 is repeated as follows:

> 1. A system, comprising:
> a base station that provides a forward channel signal; and
> a plurality of remote stations, wherein each remote station monitors said forward channel signal, monitors a reverse channel within an assigned period of time in a clear channel assessment interval, and provides a reverse channel signal when said reverse channel is clear within said assigned period of time, wherein said clear channel assessment interval is partitioned into periods of time and each of said periods of time is assigned to one of said plurality of remote stations, and said forward channel signal is provided during a predetermined forward channel interval and said reverse channel signal is provided during a predetermined reverse channel interval.

Haim Kashi fails to disclose separate forward and reverse channels as claimed. In fact, Haim Kashi explicitly states that his "invention relates to a communication system comprising at least one central station and a number of remote units arranged for communication over a common communications channel." *See* the '943 U.K. Application, page 1, lines 6-8 or the '604 U.S. Patent, col. 1, lines 6-9 (Emphasis added.). Separate forward and reverse channels are not contemplated by Haim Kashi.

Haim Kashi fails to disclose "said forward channel signal is provided during a predetermined forward channel interval and said reverse channel signal is provided during a predetermined reverse channel interval" as claimed. Emphasis added. Particularly, the background of the '943 U.K. Application merely describes a basic Time Division Multiple Access (TDMA) technique and makes no mention whatsoever that the communications intervals

of the base station and the remote units are predetermined, *e.g.*, cyclic in nature and occur at predetermined (or fixed) time intervals in each cycle. Rather, in the global interrogation technique that Haim Kashi describes, remote units do not transmit until they are interrogated (hence the technique is referred to as "global interrogation") by the base station, *i.e.*, the base station requests at varying times that the remote units send any data that they might have. Because the remote units can not transmit until they are interrogated at various random times, they are clearly not providing a signal during a predetermined (i.e., fixed) reverse channel interval. The Examiner apparently realizes this deficiency in the background and attempts to cure such by relying on Haim Kashi's actual invention as shown in Figure 6. Yet, Figure 6 also does not disclose predetermined forward and reverse channel intervals. Rather, Haim Kashi's invention as illustrated in either Figure 5 or 6 requires that each RTU is capable of receiving and understanding the data transmitted from every other RTU, so that a comparison of priority numbers can be performed. This comparison is then used to calculate a period, only at the expiration of which, does each RTU assess whether or not the transmitting channel is free. *See* '604 Patent, col. 2, lines 26-40; col. 4, line 22 to col. 5, line 54; and Fig. 5. If the channel is occupied by another RTU at that time, that RTU repeats the comparison and calculation steps, and then waits again before further monitoring. As such, the time at which channel monitoring and assessment, and then transmission if the channel is clear, begins for a Kashi RTU is at least dependent on or determined by the expiration, *i.e.*, duration, of the central unit's transmission and the priority values received from other RTUs attempting to transmit. Therefore, monitoring and assessment, and then transmission, will occur at varying unassigned (not fixed or predetermined) times. Simply put, Haim Kashi does not disclose predetermined forward and reverse channel intervals as recited in claim 1.

Moreover, the Examiner's reasoning is improperly pieced together from Haim Kashi's description of prior art and Haim Kashi's actual invention. Although the teachings of a single reference generally form the basis of an anticipation rejection, it is improper to combine the background art with the actual invention set forth, which overcome the deficiencies of the background art, especially when the reference relied upon teaches away from such a combination. In the rejection of previously presented claim 19, the Examiner attempts to reach the claimed invention by relying on a prior art SCADA system described in Haim Kashi's background section combined with Haim Kashi's actual invention as shown in Fig 6. *See* Office

Action, page 3 *discussing* claim 19. Similar combinations are set forth with respect to claims 17, 18, 32, 44-46, 55, 68, 69, and 76. Thus, the instant rejection is based on two separate and distinct inventions even though they are described in a single reference. It should be pointed out that Haim Kashi's actual invention is an alternative system to that described in the background section, which Haim Kashi teaches away from as it is inefficient and problematic. *See, e.g.*, U.K. '943 Application, page 2, lines 8-18 ("The arrangement described above is wasteful of channel time . . . . Where there are many RTU's in a single system, there is a large amount of overhead transmission and it is a problem that the cycle time for interrogation of all RTU's can be quite long. There is a need for an improved method of operation of the communication systems.") Applicant respectfully submits that Haim Kashi teaches away from combining his invention with the prior art SCADA system described. Rather than applying an anticipation test, the Examiner should apply an obviousness standard test to the combination of these separate inventions, wherein a proper motivation to combine must be shown and secondary considerations, such as the above-noted disclosure that teaches away from making such a combination, must be considered.

Independent claims 32, 55, 68, 69, and 76 recite similar, if not identical limitations as those noted above with respect to claim 1. Accordingly, Applicant submits that the instant rejection of claims 1, 32, 55, 68, 69, and 76, and all claims dependent therefrom, is unsustainable. The Examiner is respectfully requested to withdraw the instant rejection.

C. The Obviousness Rejection Over Haim

Claims 2, 3, 5-7, 25, 33-35, 40, 56, 57, 61, 70, 71, and 77 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Haim. Applicant respectfully traverses this rejection.

As stated in MPEP § 2143.01, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicant maintains that Haim Kashi fails to teach or suggest all of the claim limitations recited in independent claims 1, 32, 55, 68, 69, and 76. *See* Remarks § II.B.1, *supra*. Therefore, these claims are nonobvious, and any claim dependent therefrom, *e.g.*, claims 2, 3, 5-7, 25, 33-

35, 40, 56, 57, 61, 70, 71, and 77, is also nonobvious. Applicant respectfully requests that the Examiner withdraw the instant rejection of claims 2, 3, 5-7, 25, 33-35, 40, 56, 57, 61, 70, 71, and 77.

D. The Obviousness Rejections Over Kashi in View of Serfaty

Claims 1-3, 5-7, 15-19, 24, 25, 32-35, 40, 42-46, 50, 55-57, 61, 66, 68-71, 74, 76, 77, and 80 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Kashi in view of U.S. Patent No. 5,572,546 to Serfaty. Applicants respectfully traverse this rejection.

Haim Kashi, either taken alone or in combination with Serfaty, fails to teach or suggest all of the claim limitations recited in independent claims 1, 32, 55, 68, 69, and 76. Particularly, Haim Kashi fails to disclose at least both forward and reverse channels, and "said forward channel signal is provided during a predetermined forward channel interval and said reverse channel signal is provided during a predetermined reverse channel interval" as claimed. *See* Remarks § II.B.1, *supra.* Serfaty fails to cure the deficiencies of Haim Kashi. For instance, Serfaty discloses an acknowledgment interval featuring the use of time slots in which a unit waits to "see" that the channel is free to send an acknowledgement. Serfaty, col. 5, ll. 9-32. This acknowledgment interval is triggered by the transmission of a first unit (unit A). *See id.* at col. 4, 36-43. Serfaty does not disclose that the first unit's (or any other unit's) transmission and/or the acknowledgement interval occur at predetermined (*i.e.*, fixed) intervals. Moreover, all units share the same radio frequency. *See id.* at col. 3, lines 43-48.

Assuming that the Examiner maintains his conflicted position that the claimed "clear access interval" is not taught by Haim Kashi, Applicant incorporates by reference all arguments that the combination of Haim Kashi in view of Serfaty does not render the claims prima facie obviousness, which were submitted in the Reply of February 23, 2004.

Applicant notes that he has yet to receive a response from the Examiner regarding the contention that modifying Haim Kashi to include a clear channel assessment interval as allegedly provided by Serfaty, or any other reference for that matter, changes the principle of operation of Kashi's self-sufficient system. *See* Appeal Brief of June 20, 2003 and Response of February 23, 2004. Overlooking such is contrary to well-established patent law. Moreover, the Examiner can not overlook that combining Serfaty's acknowledgement interval into Kashi's system is not only redundant, but contrary to Kashi's stated concern of wasting critical bandwidth (*see* Kashi, col. 1, ll. 62-67). Applicant respectfully requests the Examiner to address these issues on record.

At least based on the above reasoning, the instant rejection of independent claims 1, 32, 55, 68, 69, and 76, and all claims dependent therefrom, is deemed improper. Accordingly, the Examiner is respectfully requested to withdraw the instant rejection of claims 1-3, 5-7, 15-19, 24, 25, 32-35, 40, 42-46, 50, 55-57, 61, 66, 68-71, 74, 76, 77, and 80.

E. The Obviousness Rejections Based on Haim or Kashi in view of Serfaty, and Further in View of Either Kubler, Dobbins, Orsic, Choi, or Mauney

Claims 4, 8-14, 20-23, 26-31, 36-39, 41, 47-49, 51-54, 58-60, 64, 65, 67, 75, and 81 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Haim, and further in view of either Kubler, Dobbins, Orsic, Choi, or Mauney. Alternatively, claims 4, 8-14, 20-23, 26-31, 36-39, 41, 47-49, 51-54, 58-60, 64, 65, 67, 75, and 81 stand rejected under 35 U.S.C. § 103(a), as allegedly being unpatentable over Kashi and Serfaty, and further in view of either Kubler, Dobbins, Orsic, Choi, or Mauney. Applicant respectfully traverses these rejections.

Haim Kashi or Haim Kashi in view of Serfaty, either taken alone or in combination with the cited secondary references, fails to teach or suggest all of the limitations recited in independent claims 1, 32, 55, 68, 69, and 76. Particularly, Kubler, Dobbins, Orsic, Choi, and Mauney fail to cure the deficiencies noted above with respect to Haim Kashi or Haim Kashi in view of Serfaty. Dependent claims 4, 8-14, 20-23, 26-31, 36-39, 41, 47-49, 51-54, 58-60, 64, 65, 67, 75, and 81 are nonobvious at least because they depend from one of nonobvious independent claims 1, 32, 55, 68, 69, or 76.

Accordingly, the Examiner is respectfully requested to withdraw the instant rejection of claims 4, 8-14, 20-23, 26-31, 36-39, 41, 47-49, 51-54, 58-60, 64, 65, 67, 75, and 81.

III. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

The appropriate fee for a Request for Three-Month Extension of Time is filed concurrently herewith and Applicant believes that no additional fee is required. Nevertheless, in the event that the U.S. Patent and Trademark Office requires a fee to enter this Reply or to

maintain the present application pending, please charge such fee to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

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Dated: November 5, 2004

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